

## CLAIMS

1. A primer mixture ("MOP") consisting of forward and reverse primers for PCR, characterised in  
 that the forward and reverse primers are oligonucleotides,  
 that either ("MOP-ABD")  
 the forward primers exhibit the nucleotide sequences in accordance with  
 SEQ ID NO. 1, namely:  
 ARAGTNYTDYCHCMRGGH, with a "head" at the 5' end and 3456  
 degenerations  
 and the reverse primers exhibit the nucleotide sequences in accordance  
 with SEQ ID NO.2, namely:  
 NWDDMKDITYATCMAYRWA, with a "head" at the 5' end and 27648  
 degenerations,  
 or ("MOP-C")  
 the forward primers exhibits the nucleotide sequences in accordance  
 with SEQ ID NO. 3, namely:  
 TKKAMMSKVYTRCYHCARGGG, with a "head" at the 5' end and 3072  
 degenerations and  
 the reverse primers exhibit the nucleotide sequences in accordance with  
 SEQ ID NO. 4, namely:  
 MDVHDRBMDKYMAYVYAHKKA, with a "head" at the 5' end and 8192  
 degenerations  
 and the "head" stands for a nucleotide sequence which comprises an  
 interface for a restriction enzyme and a clamp sequence at the 5' end of  
 this interface and its length does not exceed half the length of the  
 complete nucleotide sequence of the forward or reverse primer.
  
2. A primer mixture according to claim 1, characterised in that the "head"  
 section of the nucleotide sequences presented in the sequence protocols  
 has the nucleotide sequence GAAGGATCC.

3. A method for the specific detection and identification of retroviral nucleic acids/retrovirus in a specimen, characterised by type and sequence of the measures specified hereinafter:
  - Isolation of nucleic acids, namely DNA and/or RNA from the specimen,
  - Carrying out a PCR using the isolated DNA or an RT-PCR using the isolated RNA using one or both primer mixtures according to claim 1,
  - Purging the (RT)-PCR amplificates obtained and using these in an RDBH method using immobilised RDBH probes which each comprise (per probe) synthetic oligonucleotides whose nucleotide sequence corresponds to the retroviral nucleotide sequence of the retrovirus-specific reverse-transcriptase gene of the virus type to be detected with the relevant dot or a section of such a retroviral nucleotide sequence and exhibits no overlapping with the nucleotide sequences of the forward primer and the reverse primer of the primer mixtures used in the PCR or RT-PCR.
4. A method according to claim 3, characterised in that the nucleotide sequences of the synthetic oligonucleotides of the RDBH probes correspond to the retroviral nucleic acid region of the reverse transcriptase gene between the highly conserved motifs V L P Q G and Y M/V D D I/V/L L or a section of this region.
5. A method according to one of claims 3 or 4, characterised in that a mixture of equimolar quantities of both partners of a pair of synthetic oligonucleotides, which together correspond to a preferably 90 bp long section from the nucleic acid region of the reverse transcriptase gene between the highly conserved motifs V L P Q G and Y M/V D D I/V/L L , is in each case used as immobilised RDBH probes.
6. A method according to claim 5, characterised in that both partners of the pair of synthetic oligonucleotides are approximately the same size or the same length, preferably approximately 45 bp long.

7. A use of one or several synthetic oligonucleotide(s) whose nucleotide sequence(s) correspond(s) with the nucleic acid region of a retrovirus-specific reverse transcriptase gene between the highly conserved motifs V L P Q G and Y M/V D D I/V/L L or with a section of this nucleic acid region as reverse dot blot hybridisation probe(s) in a method according to one of claims 3 to 6.
8. A use of equimolar quantities of two synthetic oligonucleotides which together, positioned one after the other, correspond to a preferably 90 bp long section from the nucleic acid region of the reverse transcriptase gene between the highly conserved motifs V L P Q G and Y M/V D D I/V/L L as reverse dot blot hybridisation probe(s) in a method according to one of claims 3 to 6.
9. A diagnosis kit for the specific detection and identification of retroviral nucleic acids/retroviruses in an arbitrary specimen, comprising at least one of the primer mixtures consisting of forward and reverse primers for the PCR according to claim 1 and at least one reverse dot blot hybridisation probe according to claim 7 or claim 8.